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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,318	01/21/2004	Tadanori Nakatsuka	00862.023406.	1545
5514 7590 04/11/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER WASHINGTON, JAMARES	
			ART UNIT	PAPER NUMBER
			2609	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/11/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/760,318

Applicant(s)

NAKATSUKA, TADANORI

Examiner

Jamares Washington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1-4, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kenichi Sonobe (US 5649034 A).

Regarding claim 1, Sonobe discloses a document display method comprising:

a discrimination step of determining whether document data to be displayed satisfies a fixed condition (“...image information only on the enlarged character is used to thereby perform a uniform processing...” at column 15 line 5. “...the invention provides a method for smoothing an enlarged image, including...imputing an original image obtained by enlarging an original image m times (m is an integral number which satisfies the condition that $m \geq 2$)” at column 1 line 66. Regarding “fixed condition”, Sonobe, as depicted in fig. 8 and described at column 5, lines 1-20, sends via a host computer 1 “data such as a character code corresponding to a character to be output by a printer 2, a magnification or multiple number, and other data” to a “character pattern generating device 3”. The pattern generating device 3 “reads out from the font ROM 32 the bit map data of the font corresponding to the character code input, enlarges a bit map according to the magnification specified and performs a smoothing processing on the enlarged bit map”. Thus, the claimed “fixed condition” that determines whether and how to apply the smoothing process is the “magnification or multiple number” received by the generating device 3 from the host computer 1, as well as the “character code” and “other data”; it is based on these conditions that smoothing is implemented.);

a step of applying smoothing processing to image data, which is based upon the document data, if the condition has been satisfied (as stated above);

and a display step of displaying the image data (“The present invention relates to a method and device for smoothing enlarged characters and enlarged images for use in...a graphic display...” at column 1 line 6).

Regarding claim 2, Sonobe discloses the method as rejected in claim 1, wherein the fixed condition is that display magnification of the document data is equal to or greater than a fixed value ($m \geq 2$ as rejected above in claim 1).

Regarding claim 3, Sonobe discloses the method as rejected in claim 1, wherein the fixed condition is that width of the drawing object in a document is equal to or greater than a certain threshold value and that height of the drawing object is equal to or greater than a certain threshold value (“...there is shown a bit map of an enlarged character obtained by enlarging a bit map of a standard character twice in length and width...” at column 3 line 34. The length and width of a character is directly related to the magnification or multiple number “m”. As long as “m” stays above 2, smoothing proceeds).

Regarding claim 4, Sonobe discloses the method as rejected in claim 1, wherein the fixed condition is that the area of the drawing object in a document is equal to or greater than a certain threshold value (Area is directly related to length and width of a character, “...that is, four times in area...” at column 3 line 36. Determining whether this condition exists depends on the multiple “m” which determines the length and width of the character).

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Regarding claim 7, Sonobe discloses the method as rejected in claim 1, wherein the fixed condition is that display magnification of the document data is equal to or greater than a fixed value and, moreover, area of the drawing object in the document is equal to or greater than a certain threshold value (The present invention is for use in graphical display, therefore the claim limitations described are met by previously rejected claim 4 above).

Regarding claim 8, Sonobe discloses the method as rejected in claim 7. (Due to the “or” usage, if one of the conditions are met, the claim limitation as a whole is met.)

Regarding claim 9, Sonobe discloses a document display apparatus comprising: discrimination means for determining whether document data to be displayed satisfies a fixed condition (“...the data of a bit map...is scanned bit by bit...” “The bit map is scanned in this manner to thereby obtain image signals...” at column 8 line 17. Scanning the image provides the information needed to determine whether image is enlarged or satisfies $m \geq 2$ criteria.); means for applying smoothing processing to image data, which is based upon the document data, if the condition has been satisfied (“...resultant image signals are then supplied sequentially to a smoothing device...” at column 8 line 23); and display means for displaying the image data on a display unit (as rejected in claim 1 above).

Regarding claim 10, Sonobe discloses a computer-readable recording medium on which a program for causing a document to be displayed by a computer has been recorded, said program having:

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program code for determining whether document data to be displayed satisfies a fixed condition; program code for applying smoothing processing to image data, which is based upon the document data, if the condition has been satisfied; and program code for displaying the image data on a display unit (“...a program ROM 34 in which a program to be executed by the CPU 33 is stored...” at column 5 line 15).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenichi Sonobe (US 5649034 A) in combination with Mark A. Overton (US 5537495 A).

Regarding claim 5, Sonobe discloses the method as rejected in claim 1 above.

However, Sonobe does not teach the fixed condition as being the drawing object in a document being an image that contains characters.

Overton teaches the fixed condition is an image that contains characters (Fig. 2 numeral

4. If data is a picture, smoothing is not applied. If data is text smoothing is applied as shown in Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method as disclosed by Sonobe to satisfy the condition of being a character before applying smoothing as taught by Overton because “a picture (or non-text image)...may not be desirable to correct [because] it is not known whether any features or angles are intentional or a result of quantization error” (at column 8 line 64 Overton). In addition, smoothing “improves the quality of printed text” (at column 4 line 58 Overton).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Sonobe and Overton combination as applied to claim 5 above, and further in view of Mark A. Overton (US 5537495 A).

Regarding claim 6, the Sonobe and Overton combination discloses the method as rejected in claim 5 above.

However, the Sonobe and Overton combination above does not teach wherein a determination as to whether the drawing object in the document is an image that contains characters is made based upon [the] number of reversals between white and black [pixels] counted while scanning the image.

Overton further teaches the claimed subject matter above (“...the determination that a received input tile in step 1 is part of an image is made if one or both of the following two conditions are met. The first condition is if the number of exposed pixel faces (i.e., black-white transitions) within an input tile is greater than a certain threshold. If so, it is apparent that the

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minority pixels in the input tile are scattered and are part of an image (e.g., a halftone image)..."

Fig. 8 and at column 9 line 8 Overton).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the method of determining whether an image contained characters as taught by Overton in the method as taught by the Sonobe and Overton combination because it would be needed to calculate the extent of initial smoothing to be conducted and regulate the amount of smoothing to help preserve detail, but also lessen the damage done if the text/image separation fails.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamare Washington
Junior Examiner
Art Unit 2609

03/26/07

JW

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